

CEREMONY REPORT
ON THE PLAQUING OF
LOCOMOTIVE 3801



HELD AT ROBERTSON, NSW
ON SUNDAY 6 NOVEMBER 1994



The guests and touring public at Robertson



Representing 3801 Ltd, Chairman Prof. John Glastonbury



Representing the Institution of Engineers, Australia,
Chairman of 75th Committee, John Hopman



One of the small plaques (one each side) unveiled by
Prof. Glastonbury and John Hopman



One of the small plaques on the locomotive



One of the small plaques (one each side) on locomotive 3801



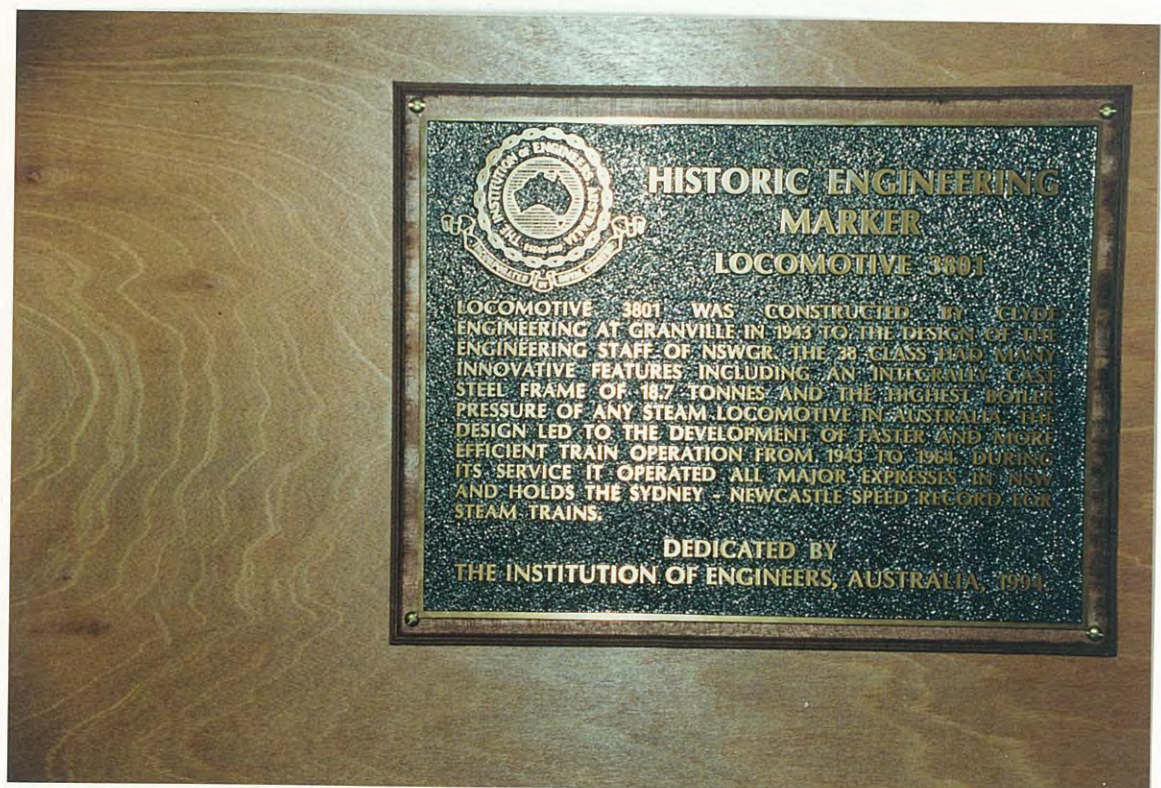
The VIP car, location of the main plaque



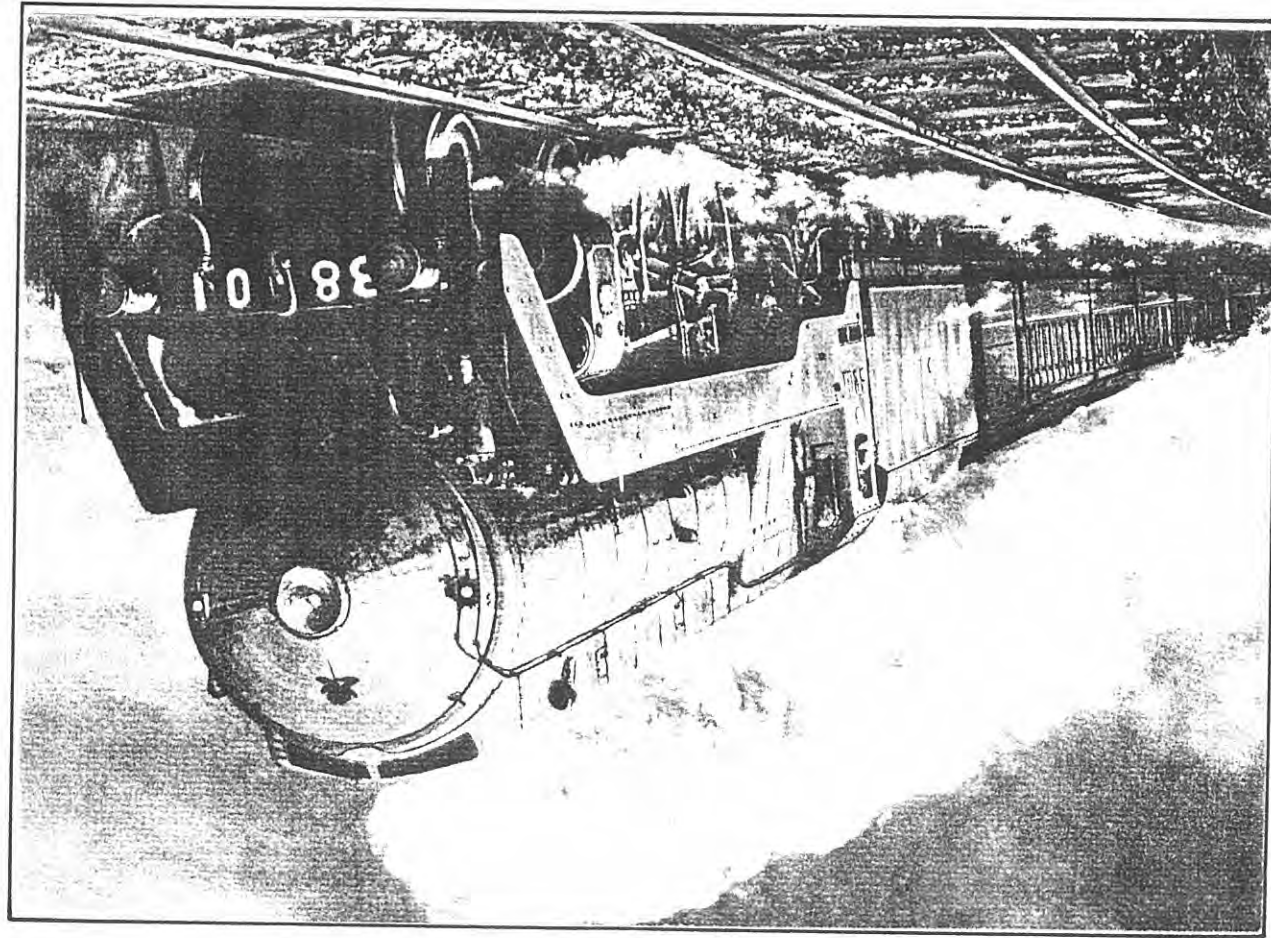
Lounge inside 3801 Ltd's VIP car



Main plaque in future conference compartment of VIP car



The main plaque



The Institution of Engineers, Australia
has pleasure in
declaring

LOCOMOTIVE 3801

to be an

*HISTORIC ENGINEERING
MARKER*

Robertson, NSW, 6 November, 1994

3801 Limited

ACN 002 951 671

WELCOME ABOARD

Welcome aboard to-day's Southern Highlands round trip. We hope you have a happy day. If there is anyway our staff, who are all volunteers, can assist you, please do not hesitate to ask.

Before you settle back to enjoy the scenery from your window, we ask that you take just a few minutes to read the following Safety Notes which are designed to ensure your comfort and safety as well as that of your fellow travellers. Your observance of these rules will help bring this about:-

- Handbrakes, air taps and other equipment must not be operated or interfered with.
- You have an allocated seat which is exclusively yours for the trip. Without spoiling your socialising, please try not to unduly block corridors and try to keep clear of the external doors of the carriages.
- Keep all parts of the body, and personal equipment, within the carriage. In particular, do not stand in or lean from open doorways. All external doors should remain closed whilst the train is in motion.
- Wait for the train to stop before entering or leaving the carriage.
- Do not throw or drop anything from the train.
- Do not leave the train at unscheduled stops.
- When crossing rail tracks, do so only by authorised public overbridges, underbridges or level crossings.
- You must remain at all times within public access areas and you must not climb off platforms or enter running line areas.

If you are inconvenienced by fellow travellers whose behaviour is a danger to themselves or to others, or is socially not acceptable, please contact your Carriage Attendant or the Train Manager.

State Rail employees are empowered to remove from the train anyone who refuses to conform to the above rules under the Transport Administration Act 1988 or the Railway Offences By-Laws, 1983.

We will journey via Strathfield, Liverpool, Campbelltown, Picton and Mittagong. Before reaching Moss Vale station, we will traverse a "Y" connection direct on to the line to Robertson. Upon arrival at Robertson, you will be able to leave the train for lunch. Passengers booked for lunch at Ranelagh House should board the road coach waiting in the station forecourt as soon as possible. Chats Restaurant, Robertson Bowling Club and Robertson Hotel are all within a short walk of the station.

After the lunch break, our train will continue eastwards to Unanderra. This is the most spectacular portion of our journey. We will pass through deep rain-forest, over high viaducts and along ridges above the coastal plain as we descend to join the main South Coast line. From Unanderra, we return to Sydney, passing through Wollongong, Scarborough, Waterfall, Sutherland, Hurstville and Sydney.

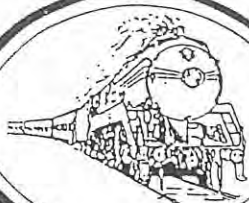
The major times of our journey and any other activity for the day are shown on your rail ticket.

The buffet will be open throughout the journey for sale of light refreshments, tea, coffee, soft drinks and confectionery. The souvenir shop is also open with items for everyone.

A map, showing our journey today, is reproduced on the rear of this sheet.

To reserve seats on our trains, just telephone our reservations facility on (02) 699 2737

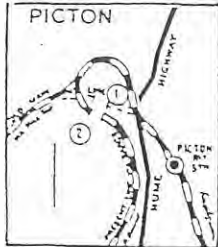
Reg Office 162 Redfern St. REDFERN
P.O. Box 3801 REDFERN, N.S.W. 2016
Tel. 699 2737



3801 Limited

4.9 M 002 311 811

PICTON



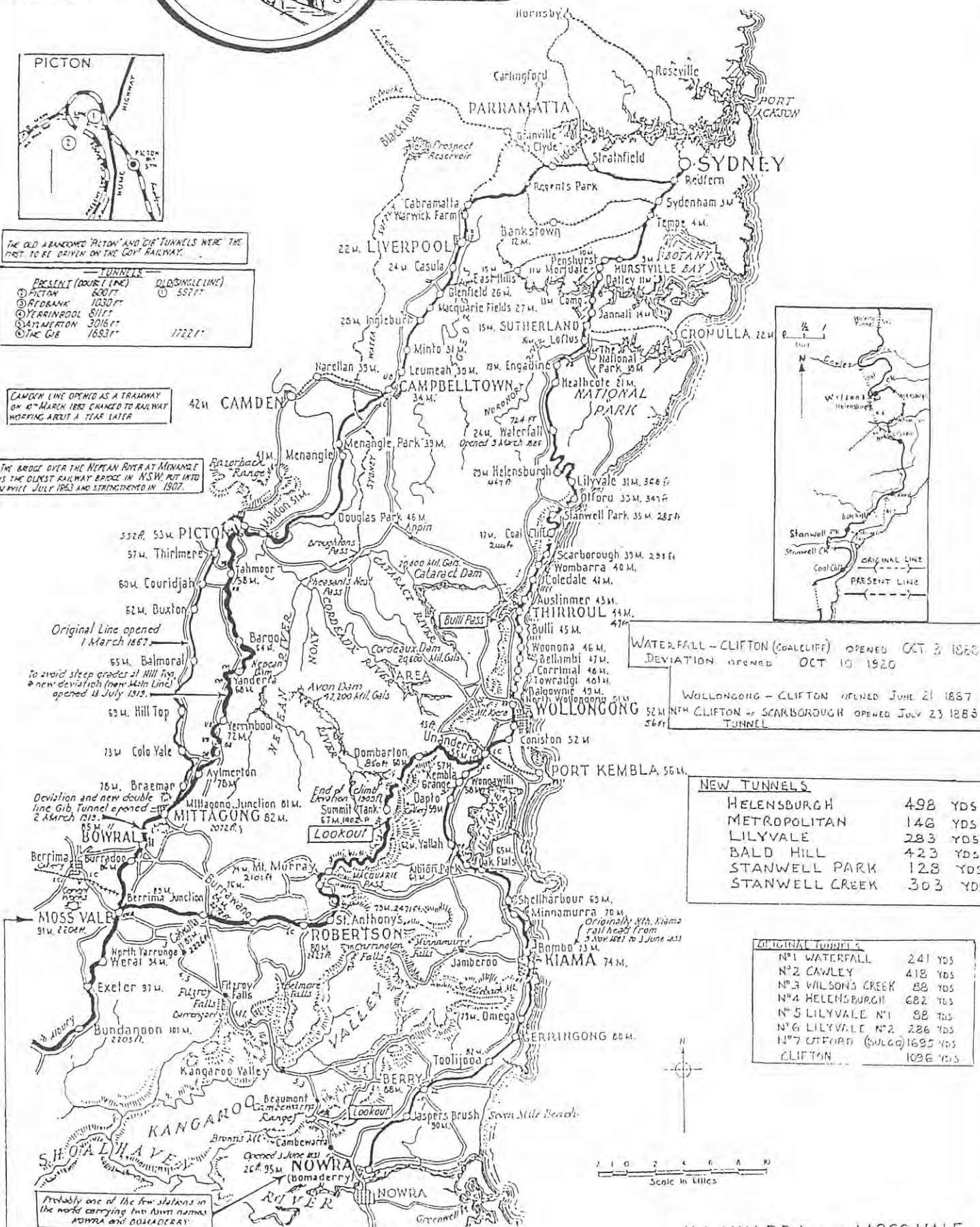
THE OLD ABANDONED 'PICTON' AND 'PIC' TUNNELS WERE THE FIRST TO BE BUILT ON THE COAST RAILWAY.

TUNNELS

PRESENT (DOUBLE LINE)	OLD (SINGLE LINE)
① PICTON 600 FT	① 552 FT
② REDRANK 1030 FT	
③ YERRINBOOL 811 FT	
④ AYLMERTON 3016 FT	
⑤ THE GIB 1683 FT	1722 FT

CAMDEN LINE OPENED AS A TRAMWAY ON 10 MARCH 1882 CHANGED TO RAILWAY WORKING ABOUT A YEAR LATER

THE BRIDGE OVER THE MURRAY RIVER AT MENANGLE IS THE OLDEST RAILWAY BRIDGE IN N.S.W. PUT INTO SERVICE JULY 1863 AND STRENGTHENED IN 1907



WATERFALL - CLIFTON (COALCLIFF) OPENED OCT 3 1860
DEVIATION OPENED OCT 10 1920

WOLLONGONG - CLIFTON OPENED JUNE 21 1867
52 M NTH CLIFTON - SCARBOROUGH OPENED JULY 23 1883
56 FT

NEW TUNNELS

HELENSBURGH	498 YDS
METROPOLITAN	148 YDS
LILYVALE	283 YDS
BALD HILL	423 YDS
STANWELL PARK	128 YDS
STANWELL CREEK	303 YDS

ORIGINAL TUNNELS

Nº1 WATERFALL	241 YDS
Nº2 CAWLEY	418 YDS
Nº3 WILSONS CREEK	88 YDS
Nº4 HELENSBURGH	682 YDS
Nº5 LILYVALE Nº1	88 YDS
Nº6 LILYVALE Nº2	286 YDS
Nº7 UTTERTON (GULGO)	1695 YDS
CLIFTON	1096 YDS

Scale in Miles

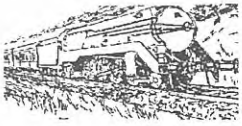
ILLAWARRA AND MOSS VALE DISTRICTS

MOSS VALE - UNANDERRA OPENED AUG. 1932

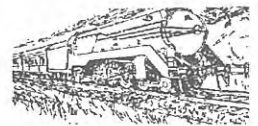
3801 Limited

(ACN 002 951 671)

No: 2664



SPECIAL TRAIN TICKET



SEAT ALLOCATION

CAR:

9

SEATS:

18;19;20;21;22;23

Allocated to: D FRASER

Number of Passengers: 6

*From Sydney to Robertson via Picton
& return via Wollongong for*

Plaquing of 3801

by Institute of Engineers, Aust.

Sunday 6th November 1994

All passengers are carried subject to State Rail Authority By-Laws and Regulations and Safety Rules

This ticket is **NOT** valid for travel on S.R.A. services

COACH TICKET

6-11-1994

Bowral to Peppers - Peppers to Robertson

Total Passengers:

Luncheon at Peppers Mt Broughton Resort

6-11-1994

Total Diners:

Train Departs **Sydney [Central] Station** at 8.10 am

Sydenham at 8.20 am

Kingsgrove at 8.30 am

Campbelltown at 9.05 am

Train Arrives **Bowral** at 10.50 am

Train Arrives **Robertson** at 11.30 am

Train Departs **Robertson** at 2.30 pm

Train Arrives **Wollongong** at 4.00 pm

Sutherland at 5.30 pm

Hurstville at 6.05 pm

Sydenham at 5.40 pm

Sydney [Central] Station at 5.35 pm

TO:

D FRASER

14 DERBY ST

VAUCLUSE NSW 2030

Forthcoming Tours

20th November - Medlow Bath - Hyro-Majestic Dinner

26th November - Katoomba, Mt Victoria & Clarence

2nd December - Bowral - International Cricket Match

3rd December - Waterfall & Bankstown [3112]

4th December - Robertson - Fitzroy Falls

10th December - Hawkesbury River & Broadmeadow

11th December - Maitland - Vineyard Resort Luncheon

3801 Limited reserves the right to vary the itinerary, motive power and rolling stock of its excursions without prior notice.

Engineers SYDNEY

October 1994

75th Anniversary Issue

The Newsletter of the Institution of Engineers,
Australia, Sydney Division. Phone (02) 929 8544



75th Anniversary Harbour Cruise For All Members

Saturday 22nd October

Time: 6.00 pm

Cost: \$40.00 per Adult
or \$70.00 a Double
or \$120.00 a Family

RSVP: By 14th October

Institution of Engineers, Harricks Auditorium
Ground Floor, 118 Alfred Street,
MILSONS POINT

*Please join us in celebrating the
75th Anniversary of the Institution.*

*Cocktails on the Harbour and
a Fireworks Display.*

If you would like to attend, please complete the
attached form and send it to the Sydney Division
Office with your payment.

*Family, Friends
and Children Welcome!*

Post to: Christine Mason, Institution of Engineers,
Australia, PO Box 138, Milsons Point 2061

Name: _____

Organisation: _____

Mailing Address: _____

Phone: _____

Additional People Attending:

1. _____
2. _____
3. _____

I have enclosed a cheque/money order for \$.....
Made payable to the Institution of Engineers,
Australia. For (no.) of people attending.



THREE PLAQUING EVENTS

*for the 75th Anniversary
celebrations of the Institution of Engineers,
Australia, 1994*

Eastern Suburbs Railway

Monday 17th October at 11.00 am
Concourse of Martin Place Station

Whipple Railway Trusses

Sunday 23 October at 2.00 pm
Reserve on north side of railway viaduct at
Lewisham, off Grosvenor Crescent

Locomotive 3801

Sunday 6th November during a day excursion
via Moss Vale and Unanderra. You must
book with Geoff Lillico (02) 699 2737 as
IEAust party, as spaces are limited.



Engineering Heritage Committee

The Engineering Heritage Committee of the Sydney
Division would like to attract additional members of
Sydney Division to assist the Committee to widen its
expertise in some areas of engineering at present
unrepresented on the Committee. These are:

*Mechanical Engineering
Communications Engineering
Agricultural Engineering
Aeronautical Engineering
Bio-Medical Engineering
and also Industrial Archaeology*

Would anyone interested please contact the Chair-
man, Mr. Ian Bowie, School of Civil Engineering,
University of Sydney (Telephone: 692 2171)

Please Note Change of Date

Please note that the Nuclear Engineering Meeting
"Nuclear Energy is Green and Practical - Have the
Environmentalists Got it Wrong?" scheduled for the
18th October is postponed until the 29th November
1994, and this will also be the Nuclear Engineering
Panel's annual Christmas Party.

Neighbourhood Engineering Program

The Neighbourhood Engineering Program (NEP) has been in operation in Sydney since 1991, and is essentially a scheme where engineers work with schools to raise awareness in students' minds regarding the role of engineering in society, and about what a career in engineering involves.

The Sydney Division has now decided to broaden the NEP, in both scope and depth. We now have an organising committee for the program to ensure continuity in organisation, and we are aiming at covering every high school in Sydney Division by the end of 1995. We are assisted in this by the release by National Office of a revised *Neighbourhood Engineers Kit*. This kit contains a wealth of resources to be used with school students of all ages.

Another initiative under the NEP will be a book award assistance, where the Institution will make some contribution towards the purchase of book prizes for awarding to school students. Exact details have not been finalised yet, but the essence will be that the Neighbourhood Engineer will decide when an award is justified, choose the prize, and the Institution will then partly refund the cost.

The Neighbourhood Engineering Program is an opportunity for engineers to become involved with local high schools, and to help students at all levels consider technical career options that they may otherwise have rejected without thinking. The level of involvement with a school is a matter of negotiation between the Neighbourhood Engineer and the Principal of the school. The commitment may be as large or small as you care to make it. The program has had some notable successes in the past, and most of the participating engineers are enthusiastic about the value of the program.

Any prospective Neighbourhood Engineer is invited to leave contact details with Karen Yu at the Sydney Division office on 929 8544.

The Neighbourhood Engineering Program for Sydney Division was relaunched this month during the Harrick's address on the 6th September 1994. Mr Doug Jones (President of Sydney Division) presented the first of our new Neighbourhood Engineers Kit to Mr Barry Foreman during the Harrick's address.

Wollongong Information

Young Professional Engineer of the year, **Fiona Herbert**, travelled down to Wollongong recently to help enthuse and inspire young women into an engineering career. Fiona was principal guest speaker at the "Lifestyles '94" Seminar which is organised and sponsored annually by Women in Engineering Network (University of Wollongong), Faculty of Engineering, Dept. of Electrical & Computer Engineering and the Illawarra Regional Office of the IEAust.

The Seminar serves not only to keep undergraduates enthused and committed to their studies, but provides a perspective on engineering which may attract female secondary students into a career in professional engineering. Speakers give the audience insights into their work and lifestyles as women in a traditionally male dominated profession.

The principal guest speaker is usually an engineer who has worked for several years and is able to provide a strong role model. During her presentation she will discuss what initially attracted her to engineering, her tertiary education and a description of her career. At this point it is also useful to give a brief description of the organisation that employs her, her role within this organisation and whether there is room for promotion or travel. The other speakers on the day are usually women in earlier stages of their career and they concentrate more on describing their own particular discipline. All of the speakers relate their experiences as a woman working in the field of engineering.

Fiona's presentation was lively and entertaining and combined with her personal philosophies, she certainly presented the audience with a recipe for success. She exuded confidence and satisfaction, not only with her work, but with her own personal lifestyle generally and was a joy to listen to.

The other speakers on the day, Julie Piggott (Civil), Monika Motor (Electrical) and Elaine Quah (Computer) also gave the audience excellent presentations and helped to present a clearer picture of what an engineer in these fields do with their time and expertise.

During the years that I have been involved with this seminar, the response has always been that it is a very positive and worthwhile exercise and this year has been no exception. However, it would not be such a success without the high calibre of speaker we have always been lucky enough to attract.

Judy Gordon
Illawarra Regional Office

What is Happening in The WEST.....

The Western Sydney Regional Office will be servicing over 3,400 members. A letter and participation forms have been sent out to introduce the office to all our Western Sydney members. Further developments include seminars and workshops on resume writing, interview techniques and time management skills, which will be organised for all IEAust members. Also, keep a spot in your diary for Western Sydney's Annual Dinner to be held in December!

Public Speaking Competition.

Our first student activity was held on Tuesday 16th August, with students competing for a place in the Malcolm Stanley Speaking Competition in September. The scores were all very close, but **Fiona Watling** (1st year Electrical) won first prize, with **Philo Daniel**, (3rd year Electrical) coming in a close second. Congratulations!

Western Sydney Needs You!!!

Paula Roe, the Regional Co-ordinator, is looking for interested members to join the various programs Western Sydney is running, including:

- * the Neighbourhood Engineers Scheme
 - * Young Engineers Western Sydney, and
 - * Western Sydney Regional Group.
- * If your company/organisation is willing to provide work experience, industrial training, site tours, etc. for school and university students, then ask to be put on the **Western Sydney Engineering Directory**.

Further information and nomination forms for the above are available from:

Paula Roe, Regional Co-ordinator
Institution of Engineers, Australia
Room XB 232, Engineering Building
PO Box 10
KINGSWOOD NSW 2747
Phone: (047) 360 144
fax: (047) 360 145

Book Your Copy Of The Historic Harbour Bridge Video

Produced as a 75th Anniversary Initiative these videos are being made available to members of the Institution at reduced prices.

25 minute version M\$12.50 N/M \$15.00
50 minute version M\$20.00 N/M \$25.00
(Plus postage and handling)

Place your order by phoning 929 8544 and ask for Christine Mason to avoid disappointment.



Left to right Drew Bewsher (Chairman of Western Sydney Water Engineering Panel), Professor Godfrey Lucas (Dean of Faculty of Engineering Uni. Western Sydney), Paula Roe (Regional Co-ordinator of Western Sydney Office), Doug Jones (President of Sydney Division) and Dominic Cancian (Secretary of Sydney Western Group)

Western Sydney Regional Office Official Opening

The Western Sydney Regional Office at the University of Western Sydney's Kingswood Campus, was launched on Friday 19th August 1994 when Sydney Division President, Doug Jones, declared the office open.

In attendance at the function were Professor Jillian Maling, Chancellor of the University and Professor Godfrey Lucas, Dean of the Faculty of Engineering, together with University staff, members from Western Sydney and Local Business Leaders.

A presentation was made to Professor Maling and Professor Lucas by Doug Jones and Drew Bewsher, in recognition of their efforts in assisting the Institution establish a Western Sydney Office. Professor Maling spoke of the importance of the University's links with industry and business. A tangible example of this is through the Institution which allows establishment of the standing and credibility of the University in the community.

The opening of the office is evidence of the Institution bringing its services to the members, particularly those in the dynamic Western Sydney Region. The office will provide administrative support to the Western Sydney Regional Group and Western Sydney Water Engineering Panel, in addition to a wide range of Institution membership facilities i.e., Neighbourhood Engineers, Professional Interviews and the development of the YEWS (Young Engineers Western Sydney) group with the students at the University.

Members in Western Sydney are welcome to call into the office and meet Paula. The office is located in the Ben Chifley Engineering Building, Kingswood Campus, University of Western Sydney, Second Avenue, Kingswood.

National Engineering Week Launch Sunday, 4th September at Homebush Bay



The Athletic Stadium for the Sydney 2000 Olympics.

The Official Launch of National Engineering Week was very successful, with approximately 200 people attending.

The launch began at 11.00 am with a tour of the 15,000 seat Athletic Stadium, conducted by officials from the Sydney 2000 Olympic Committee. Details were given about the construction and future use of the stadium after the 2000 Olympics.

At 12.00 pm the official launch got underway with Doug Jones (President of Sydney Division), welcoming the members, families and friends of the Institution. He then introduced Mr. John Baker who spoke about Technical Aid for the Disabled. Doug Jones then introduced Lyle Griffiths (Chairman of Young Engineers Sydney) who presented the award for the "Young Engineer of the Year" to Michael Fieldhouse and the "Young Engineering Associate of the Year" award to Joseph Schembri. Next, Doug Jones presented the "Professional Engineer of the Year" award to Dr. Peter Farrell (Executive Chairman, Rescare Limited).

Following on, Doug Jones introduced Alex Bailch (Councillor) who presented an additional Award to the "National Professional Engineer of the year" Dr. Peter Farrell.



Lyle Griffiths (Chairman of Young Engineers Sydney) Presenting Michael Fieldhouse with the "Young Engineer of the Year" Award.

Alex Bailch then introduced George Ossipoff (Australian Secretary, Institute of Chemical Engineers). George presented a plaque to the Sydney Athletic Centre. Max Sherrard accepted the plaque on behalf of the Sydney Athletic Centre. George Ossipoff closed the proceedings with an invitation to lunch.

After lunch the gathering re-grouped for a tour of the newly built Aquatic Centre, which will be opened to the public in October. The Centre has a main competition pool and a practising pool. The practising pool has an adjustable floor which can be raised or lowered depending on the different activities being held in the pool.



The Aquatic Centre for the Sydney 2000 Olympics.

There is also a pool with 4 levels for diving, and finally there are recreation facilities available for children, with a water slide, turbo pools, spas, saunas, and a novelty swimming pool area. (Unfortunately most of these pools were empty and due to the heat of the day, if we had brought our cosies I'm sure a few of us would have jumped in.)

In all, National Engineering Week got off to a tremendous start and the tours were very informative and enjoyed by all participants.

*Christine Mason
Editor*



The Diving facilities at the Aquatic Centre for the Sydney 2000 Olympics.

CUT THROUGH THE COMPLEX JARGON OF ACCOUNTING AND BE ABLE TO RELATE TO ACCOUNTANTS & ACCOUNTING REPORTS

A Special Program for Engineers

The practical, "hands-on" approach of this workshop will help you to gain a working knowledge of the terms, principles and everyday applications of accounting and finance by taking you step-by-step through:

- * Fundamental concepts and rules of accounting/business
- * Understanding the three key financial statements: the profit and loss account, balance sheet and cash flow statement
- * Using ratio analysis and working capital evaluation
- * How to prepare a capital expenditure proposal
- * Good and bad budgeting practices.

ACCOUNTING FOR ENGINEERS

Presenters

John Petty B.Com (Hons) FCPA

John has extensive accounting experience in both his own company and CSR Ltd. He has been lecturing for more than 20 years having developed courses specifically for non-accountants.

Frank Portelli FCPA

Lecturer in Accounting, University of Technology, Sydney. Frank spent a decade working in Commerce & Industry, and for the past 18 years has been a lecturer in accounting at UTS.

Professional Development

This programme has been designed to meet the requirements of the Institution of Engineers, Australia.

Dates and Venues

Monday 7th November

The Rest Hotel, Alfred street, Milsons Point

Tuesday 8th November

Warragamba Room
Prospect Electricity,
Huntingwood Road
Huntingwood (Blacktown)

Tuesday 15th November

The Rest Hotel, Alfred Street, Milsons Point

Thursday 17th November

Function Centre, University of Wollongong, Union Building (11) Northfields Avenue, Gwynneville

Time: 8.30 am - 4.30 pm

Fee: \$295.00 per person

CPD: 7 Structured Hours

Course No: 2108

Closing Date: 31st October 1994

Book Early as spaces are limited.



PROFIT FROM OUR EXPERIENCE



Accounting for Engineers Course No. 2108

Return to: The Product Administrator - Professional Development, Australian Society of CPAs, PO Box Q290, GVB, Sydney NSW 2000 Fax: (02) 299 7398 Ph: (02) 262 6200 ACN 008 392 452

Name: _____ Mr ☐ Mrs ☐ Ms ☐ Miss ☐

First Name: _____

Organisation: _____

Position: _____

Phone No: _____

Mailing Address: (Bus. Priv.) _____

P/Code: _____

Cheque enclosed \$ _____ or Bankcard ☐

Mastercard ☐

Visa ☐

Amount Paid \$ _____

Expiry Date _____

..... / / Signature: _____

My preferred date and location is

Monday 7 November (Milsons Point) ☐

Tuesday 8 November (Blacktown) ☐

Tuesday 15 November (Milsons Point) ☐

Wednesday 17 November (Wollongong) ☐

Registrations must be received by the above closing date. Registrations received after this date cannot be guaranteed a place. If insufficient registrations are received by this date, the Society reserves the right to defer or cancel the course. Cancellations and transfers will only be accepted up to 7 days before the commencement of the course. From this date a substitute registration will be accepted as no refund will be granted. Telephone registrations and copies of this form are accepted on the above conditions.

Maintenance in the Mining and Metallurgical Industries

**Presented by the
Australasian Institute of Mining
and Metallurgy Illawarra Branch
and University of Wollongong**

4-7th October, 1994

Novotel Northbeach, Wollongong, NSW

The Conference will pursue the optimization of business performance (costs, capital, profitability, safety and risk management) by developing a greater understanding of maintenance theory and technology, and their application and practice within the operational and business context. It will focus on developing a framework that integrates traditional and state-of-the-art maintenance theory and technology with current maintenance practices in the mining and metallurgical industries and emerging international "best practice" concepts in general industry application.

For information contact:

James Cook, Conference Manager
Tourism Wollongong
93 Crown Street
WOLLONGONG NSW 2500
Telephone: (042) 280 344
Fax: (042) 280 300

Publications for Sale

Sydney Division has the following publications for sale:

National Competency Standards for Prof. Engineers
Members \$15.00 and Non-Members \$30.00

Commonwealth Enterprise Energy Audit Program
\$25.00 (plus Postage & Handling) with binder and
\$10.00 (plus postage and handling) without binder.

Deadline!

The deadline for the next issue of *Engineers Sydney* is Wednesday 5th October.

If anyone would like to place an article in *Engineers Sydney* please contact the Editor:

Christine Mason on (02) 929 8544.

6 *Engineers Sydney* October 1994

Associates Column

The Annual General Meeting of the Institution's Society of Engineering Associates (Sydney Division) will be held on Tuesday November 8th, commencing at 6.00 pm in the Auditorium, 118 Alfred Street Milsons Point. All members of the Society and Institution are invited to attend.

Nominations for the Society's Divisional Committee for 1995 are being sent separately to all members. Please give careful consideration to assisting the Committee either as a Board Member or in one of the Institution's various panels and committees. Ideally I would like to see an Associate on each of these panels reporting back to the Society's committee.

At present, between 6 & 10 members are actively involved in running the Society here in Sydney. This figure is LESS THAN 1% of the Society's members in Sydney Division, and regretfully it shows from our lack of activity! A strong and vibrant Society/Institution can only prosper when YOU get involved - otherwise, "Why did you join?"

Several members of the Committee have been approached by Education authorities for comment on courses to be offered in 1995. We are also in the process of setting up a liaison group with the NSW TAFE. This may lead to direct input with future course structures. The courses would be developed with the assistance of employer groups, unions and government. It is envisaged that courses will include articulation to technologist and engineer level.

I have written in previous columns about Competency Standards for Associates. The Institution has released the First edition of Competency Standards for Associates Stage 1 & 2 (Graduate and experienced Associates, but NOT including Senior, Managing and Specialist). Please enquire via the Division office.

Your Columnist

Phil Davis MSEA, Assoc. IEAust.

Engineering Excellence Awards

Sydney Division will announce the winners of the Excellence Awards on Friday 21st October.

Awards Presentation

The presentation will be held at the recently restored Sydney Town Hall. Proceedings will start at 7pm.

For more information contact:

Fiona Ismay on (02) 929 8544.

Division Calendar - What's On ?????

The majority of meetings are held in the IEAust Auditorium, Ground Floor, 118 Alfred Street, Milsons Point with refreshments at 5.30 pm for a 6.00pm start. As meetings are liable to cancellations at short notice, members are requested to ring Christine Mason on (02) 929 8544 to confirm details of meetings.

Date	Organiser	Title/Details
October		
3 Mon.	Young Engineers Sydney	Committee Meeting. Venue: IEAust Boardroom. Time: 6.00 pm.
4 Tue.	Transport Panel/AITPM	Public Consultation - North Sydney Traffic Study. Speaker: Peter Edwards, North Sydney Council and Consultant.
5 Wed.	Electrical/Environmental Branches	Computer Modelling: Environmental Applications. Speakers: From the Water Board and Dept. of Water Resources.
5 Wed.	Society of Maintenance	Logistic Engineering Seminar. Contact Peter Kohler on 359 2007 for details.
10 Mon.	Society of Military Engineering	Maintenance Development Implementation Team. Speaker: Capt. Kohler.
12 Wed.	Aust. Geomechanics Society	Stability of Pillars in Newcastle Coal Mines. Speaker: Jim Galvin.
12 Wed.	Illawarra Regional Group	Seminar - Stress and Vibration Troubleshooting in Industry. Speaker: Mr. Rob Widders, ETRS Pty Ltd. Contact Judy Gordon on (042) 214 086 for details.
13 Thu.	Electrical Branch/IREES	VLSI Developments.
17 Mon.	Toastmasters group	Mobile Telephones. Contact Yeshwant Ponkshe on 743 3331 for details.

Electrical Engineering Congress

24-30 November 1994

The Electrical College proposes to celebrate the 75th Anniversary of the Institution during the forthcoming Electrical Engineering Congress, being held at the Hilton Hotel. The theme of the Congress is "Enabling Technologies - Developing Industries", and it will have 11 separate streams serving the interests of all facets of electrical engineering.

Registrations are now being sought. Copies of the full program and registration booklet can be obtained from AE Conventions on (06) 273 2918 or Fax (06) 270 6562.

To celebrate the 75th Anniversary, a dinner will be held at the Powerhouse Museum on Monday, 28th

November 1994. The Conference dinner will be held on Friday 25th November. Guest speaker will be Robin Williams, of the ABC.

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Society of Engineering Associates

Annual General Meeting

8th November, 1994

6.00 for 6.30 pm start

**Institution of Engineers, Australia
Harricks Auditorium, Ground Floor
118 Alfred Street
Milsons Point**

ALL WELCOME!

Division Calendar - What's On ?????

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Date	Organiser	Title, Details
17 Mon.	Engineering Heritage	Electricity Supply in New South Wales, The First Century and Beyond. Speaker: Frank Brady, Former Chief Exec. of NSW Electricity Commission.
18 Tue.	Nuclear Engineering Panel	Radioisotope Techniques for Problem Solving in the Offshore Oil and Gas Industries. Speaker: Dr. J. S. Charlton.
19 Wed.	Western Sydney Water Eng.	BMP's - How will they Affect You? Speaker: Eric Hatfield. Venue: Ramada Hotel, 18-40 Anderson Street, Parramatta. Time: 12.15 pm - 2.00 pm. Contact Drew Bewsher on 868 1966 for details.
20 Thu.	Quality in Engineering	Education for Quality. Speaker: Dr. Guy Beaubois.
20 Thu.	Monaro Group	AGM. Video: Tas-Vic HVDC Link. Contact Damien Kenneally on (064) 520 233 for details.
21 Fri.	Sydney Division	Engineering Excellence Awards Dinner Dance and 75th Anniversary Celebrations.
22 Sat.	Riverina Group	AGM. Wagga. Speaker: Len Beadell. Contact Peter Ross on (069) 235 387 for details.
24 Mon	Maritime Panel	Third Runway - Monitoring of the Impacts on Coastal Processes.
24 Mon.	Instit. of Metals and Materials/ Aust. Foundry Instit.	Investment Casting. Speaker: Robin Connaughton SIT Ultimo. Venue: PPES, 172 Silverwater Road, Silverwater. Contact Peter Franklin on 756 4599 for details.
25 Tue.	Civil Engineering Panel/CIA	Formwork - The State of the Art. Speaker: W. Anderson.
26 Wed.	Manufacturing Branch	Industrial Engineers Contribution to Workcover. Speaker: John Shervington.
27 Thu.	Electrical Branch/IEEE	Design Aspects of 20MW Battery Energy Storage System. Speaker: Jim Logothetics, Pacific Power.
31 Mon.	Risk Engineering Society	Project Risk Management. Speaker: Dr. Dale Cooper. Contact Ross Woollett on 960 3720 for details.

November

2 Wed.	Environmental Engineering Management	Is there a Consensus for State of the Environment Reporting?
3 Wed.	Sydney Western Group	Badgerys Creek Airport Development. Time: 4.00 pm. Contact Jeff Roorda on (047) 32 7557 for details.

STAFF TO BE "MORE VISIBLE"

Current discussions with unions could result in railway station staff becoming "more visible" to the public, CityRail Group General Manager Lucio Di Bartolomeo said last month.

"Automatic ticketing has freed the staff from the unchallenging role of sitting in an office for long periods," he said.

"Staff visible on the platform will provide passengers with a feeling of greater security and customer service."

"CityRail will maintain existing hours of operation, and in the event of a machine malfunction staff will be able to sell tickets," he added.



ENGINEERS MARK 75th ANNIVERSARY WITH RAIL PLAQUES

The Institution of Engineers will unveil three plaques with rail connections to mark its 75th anniversary celebrations this year.

Sites of the plaques are:

The Eastern Suburbs railway, on Monday, October 17, at 11 am on the concourse of Martin Place Station;

Whipple railway trusses, on Sunday October 23 at 2 pm, at the reserve on the north side of the railway viaduct at Lewisham, off Grosvenor Crescent, and

Locomotive 3801, which will be undertaken on Sunday, November 6, during a day excursion via Moss Vale and Unanderra.

Tickets for the trip can be booked with Geoff Lillico, on 699 2737, and cost \$45 for adults and \$35 for children.

TRAVEL STAFF WELL REPRESENTED

Countrylink's Travel Centre staff were well represented at a recent Australian Federation of Travel Agents (AFTA) convention on the Gold Coast.

Countrylink representatives were Tim Poulter (Sales and Marketing Manager), John Whitty (Manager, Wagga Wagga), Wayne Bell (Manager, Dubbo), Jeff Thurgood (Manager, Armidale), John Dougall (Manager, Casino) and Andrew McInnes (Manager, Wynyard).

Theme of the convention, which all taking part considered very educational, was "Professionalism Leads to Profitability".

It focused on subjects such as the legal side of travel, information technology, training, quality management, and customer service.

HIGH SPEED RAIL WORLD CONGRESS IN 1995

A top level congress on high-speed rail will be held at Lille, in Northern France, in October next year.

Eurailspeed 95 is expected to be attended by more than 1200 delegates, 400 jourmanists and 300 exhibitors from all over the world.

It will include a congress on major issues on high-speed rail, a trade exhibition and a display of high-speed rollingstock at Lille station.

The congress, to be held from October 4 to 6, will be held at Lille's recently built congress centre, a facility at the hub of the Paris-Brussels-London high-speed link.

Data on Eurailspeed 95 is available from the International Union of Railways (UIC) 16 rue Jean Rey, 75015 Paris, France.

RESPONSE TO FREIGHT RAIL SURVEY

More than half Freight Rail's 9000 employees have replied to a recent survey from EEO.

But regionally, the response ranged from a low of just 26.1 per cent to a high of 86.9 per cent.

The survey was designed to help Freight Rail put strategies and programs in place to provide career opportunities for employees.

Employees with literacy/numeracy problems will be targeted as a priority.

People with disabilities may require special equipment or training to help them in their job.

ON THE COUNTRY TRAIN

\$1m UPGRADE COMPLETE



HISTORIC STATIONS RESTORED

The \$1 million upgrade of Dubbo railway station, with its new coach interchange and Countrylink Travel Centre, was completed late in August.

The coach interchange and upgraded forecourt costing \$500,000 was the second stage of the project to restore and refurbish the historic station.

A new carpark and under-cover coach bays were

designed to complement the sandstone of the 1881 building.

Rail customers can now walk completely under-cover from the western XPT to coaches.

A new access road enables coaches to leave the station area without disrupting carpark traffic.

Earlier work included improvements to the travel centre and the station's waiting rooms.

The third stage of a \$655,000 upgrade of Albury railway station was completed last month.

The work included new toilet facilities and a spacious toilet for disabled people, and a baby change table.

Stage 4, restoration of the station's verandahs, should be completed next year.

The historic station was opened on February 26, 1882 - a year after the Great Southern Railway reached Albury.

HOLIDAY PACKAGES CAMPAIGN



THE LAST GUARD



Tony Williams - Countrylink's last Special Guard goes into retirement.

ERA ENDS WITH TC

When the XPT from Taree pulled into Terminal on Sunday, August 21 it brought an end to an era of rail travel.

Tony was the last Countrylink Special Class Guard to work a train back to Sydney - the position of train guard now replaced by a Passenger Services Supervisor.

[When the change was introduced in June, Countrylink GM Kim Finnimore described it as a "win-win situation".]

Telephone 1

Tony's first job on railways was as a signaller at North Sydney.

Box in March, 1970.

Later he was a signaller at Artamon, Darling Harbour, and at Hornsby, Dulwich Hill.

Stationed at Redfern, he served a stint as Ticket Collector between Parramatta and Broken Hill, and as a guard again.

His next move was to Sydney Depot where he worked the Special Class Guard - finally retiring in 1984.

At 58 years of age, with 41 years of service, he is retiring early because of his wife Elsie's health problems.

Eight children

"She gave me a lot of love and support."

"Broadmeadow maintenance"

"Broadmeadow maintenance"

NEW ROLE FOR CENTRE

Countrylink has taken control of CityRail's Broadmeadow Fleet Maintenance Centre, which will now be called the Broadmeadow Endeavour Service Centre.

New Endeavour rollingstock introduced into the Hunter last May is replacing 620/720 class rail motors (DMUs - Diesel Multiple Units).

The DMUs will be phased out gradually until 1998 when the full Endeavour fleet will number 16 cars.

Countrylink will soon sign a service agreement to maintain CityRail Newcastle's Endeavour fleet.

"Broadmeadow maintenance"

From :- Don Fraser ph/fax 337 4867
To :- Members, Engineering Heritage Committee, Sydney Division.

21 July 1994

Plaquing 3801

This morning I visited Eveleigh, had discussions with Tony Gogarty and Gary, and inspected the loco and their refurbished Lounge Car.

Plaques and their locations

Three plaques will be used, the standard HEM 16 in x 12 in plaque and two "half-size" plaques 14 in x 7 in. The latter have been received, the former is yet to arrive so I took the Medlow Bath plaque for discussion purposes.

The original idea was to put the standard plaque in the 3801 office at Refern, but it would receive very little public exposure there. However, in the Lounge Car there is space among other sponsor plaques for ours to be a centre-piece where it will be seen by passengers every time the car is made part of a train set. I have provisionally endorsed this.

The small plaques are to be attached to the loco, one on each side. The area under the cabin window is too crowded and the area just forward of this presents a couple of minor technical adjustments. However, the narrow rectangular appearance of the plaques makes them better suited for attachment midway along the sides above the driving wheels. They will still be above platform level for people to photograph. One plaque was temporarily positioned and looked OK. I have provisionally endorsed this also.

Ceremony - time and location

It had been agreed in principle at earlier committee meetings that the unveiling ceremony coincide with a 3801 excursion, not at Central at 8am but later on the journey. A very good day-long excursion is the round trip via Moss Vale, Robertson and Unanderra, leaving Sydney about 8.30am and returning around 5.30pm. The stop at Robertson noon - 2.15 pm is a good place for the ceremony, lunch and shopping.

There are two dates for this outing Sunday November 6 and Sunday December 4. The latter is too close to the end of the Heritage Conference in Christchurch NZ, so it looks like we book the former.

The standard procedure is that when people book as I E Aust group, \$45 per person \$35 per child under 14, they say so and we start to fill the train from the front. But at the same time the general public is booking from the rear. When the two meet, bookings close. There is also a 1st class rate of \$50 per person.

But if we can guarantee 50 people at \$55 per person (no concessions), 3801 Ltd will attach the Lounge Car for the exclusive use of that group. Others of I E Aust party can still travel in the standard way but will not have access to the Lounge car. I E Aust parties will be badged accordingly.

Decision

Our next meeting on August 10 is getting a bit late for putting all the ceremony arrangements into place, and will be rushed due to "Leaning Tower of Pisa" talk to follow. So I request some phone-fax comments and a decision by Friday 29 inst.

Regards,



Don Fraser
14 Derby Street
Vaucluse 2030
ph/fax 337 4867
9 October 1994

Ian McNamarra
"Australia All Over".

Dear Ian,

I heard your item today about Locomotive 3801 and thought that your listeners might be interested in the Institution of Engineers plans to recognise the engineering merit this great locomotive and its class.

As you see from the attached information a plaquing ceremony will take place on Sunday 6th November during a day excursion via Moss Vale and Unanderra.

The Institution has a national plaquing programme that already has seen 35 engineering works so honoured all over Australia and covering all disciplines of engineering.

The programme has received added attention this year because its the 75th anniversary year of the Institution but engineers, of course, have been serving the wider community for a lot longer than that.

During this anniversary year Sydney Division has commemorated the 1888 Prospect Reservoir Complex, the 1907 Medlow Bath Dam (the thinnest arch dam in the world at the time of construction), 1982 Sydney Tower (Centre Point), the 1979 Eastern Suburbs Railway (both are examples of modern engineering complexity), an 1886 railway bridge at Lewisham and now the 1943 locomotive 3801.

But similar commemorations are taking place elsewhere in Australia, the 1878 Jervois swing bridge in Adelaide; the 1897 Sewage pumping station at Spotswood, Melbourne; the 1912 wireless station at Applecross, Perth; and the 1916 hydro-electric power station at Waddamana, Tasmania.

There is enough background information attached for your programme but if you wish to involve me I'd be happy to cooperate.

Regards

ph/fax 337 4867

Facsimile:

Date: 6 July 1994

Total no. pages
(including this one)

3

To: Arrow Engraving & Foundry

Fax number: (03) 553 2086

File: 3/6/85

From: Mena De Angeli, College Secretary
on behalf of Robert Breen, Associate Director Engineering

Subject: **DESIGN, MANUFACTURE AND SUPPLY OF BRONZE PLAQUE**



Approval is given for the manufacture of one standard size plaque (16" x 12") and two small plaques (14" x 7") as per your fax dated 28.6.94 (copy attached).

Please arrange delivery to:

3801 Ltd
1st floor
182 Redfern Street
REDFERN NSW 2016

Attention: Mr G Lilico.

Please send invoice to:

The Institution of Engineers, Australia
11 National Circuit
BARTON ACT 2600

Attention: Mr R Breen.

Mena De Angeli

cc Dr Don Fraser, Convenor, Commemorative Plaque Sub-Committee
Tony Moulds, Chairman, National Committee on Engineering Heritage

Arrow.fax

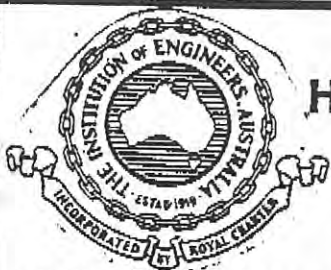
ARROW ENGRAVING & FOUNDRY

123-125 BERNARD STREET, CHELTENHAM, VICTORIA
ADDRESS ALL CORRESPONDENCE TO P.O. BOX 213, CHELTENHAM 3192
TELEPHONE (03) 555 2922 FAX (03) 553 2086 (008) 33 5692

PAGES SENT INC. COVER 2 DATE 28.6.94

TO INSTITUTE OF ENGINEERS ATTENTION ROBERT BREEN FROM GEORGE

~~4~~ 4 BOSSES SIZE 14" x 7" 30070



HISTORIC ENGINEERING MARKER LOCOMOTIVE 3801

LOCOMOTIVE 3801 WAS DESIGNED BY NSWGR MECHANICAL ENGINEERS
AND CONSTRUCTED BY CLYDE ENGINEERING AT GRANVILLE IN 1943. FROM
THEN TILL 1964 IT OPERATED ALL MAJOR EXPRESS SERVICES. IT HOLDS THE
SYDNEY TO NEWCASTLE SPEED RECORD FOR STEAM TRAINS.

THE INSTITUTION OF ENGINEERS, AUSTRALIA, 1994.

PLEASE CHECK OVER SPELLING AND LAYOUTS OF
BOTH PLAQUES.

REGARDS
George

ARROW ENGRAVING & FOUNDRY

123-125 BERNARD STREET, CHELTENHAM, VICTORIA
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TO ATTENTION FROM

to
to

4 BOSSES

SEND ANOTHER BROMIDE!!

300%



HISTORIC ENGINEERING MARKER LOCOMOTIVE 3801

LOCOMOTIVE 3801 WAS CONSTRUCTED BY CLYDE ENGINEERING AT GRANVILLE IN 1943 TO THE DESIGN OF THE ENGINEERING STAFF OF NSWGR. THE 38 CLASS HAD MANY INNOVATIVE FEATURES INCLUDING AN INTEGRALLY CAST STEEL FRAME OF 18.7 TONNES AND THE HIGHEST BOILER PRESSURE OF ANY STEAM LOCOMOTIVE IN AUSTRALIA. THE DESIGN LED TO THE DEVELOPMENT OF FASTER AND MORE EFFICIENT TRAIN OPERATION FROM 1943 TO 1964. DURING ITS SERVICE IT OPERATED ALL MAJOR EXPRESSES IN NSW AND HOLDS THE SYDNEY - NEWCASTLE SPEED RECORD FOR STEAM TRAINS.

DEDICATED BY
THE INSTITUTION OF ENGINEERS, AUSTRALIA, 1994.